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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/082,218 | 02/26/2002 | Yoshihiro Seiki | 2936-0149P | 2617 |
| 2292 | 7590 | 06/01/2004 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | TRAN, TUAN A | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2682 | 6 |

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,218

Applicant(s)

SEIKI, YOSHIHIRO

Examiner

Tuan A Tran

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2.5</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murat (GB 2327572) in view of Chao-Cheng (5,991,643).

Regarding claims 1, 5-7 and 9-11, Murat discloses a mobile communication device 1 wherein the mobile communication device 1 is a cellular telephone device (See fig. 1 and page 1 first paragraph) comprising: a non-directional antenna 2; a directional antenna 3; a transmitter/receiver section; a switch 6 for switching states of connection between the non-directional and directional antennas 2, 3 and the transmitter/receiver section (See fig. 2 and page 4 sixth paragraph); and a control circuit wherein when operation other than voice communication is being performed (free-standing position), the switch connects the non-directional antenna to the transmitter/receiver section; and when voice communication is being performed (talk position), the switch connects the directional antenna to the transmitter/receiver section (See fig. 2 and Abstract, pages 4-5). However, Murat does not mention that the switch being controlled to connect non-directional antenna when the received signal is lower than a predetermined level, and to connect to the directional antenna when the received signal is higher or equal to the

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predetermined level. Since Murat suggests to use directive antenna in talk position to minimize radiation from the antenna to the user's head and to increase the gain of the antenna effectively (See page 2, second paragraph) and Chao-Chen teaches a mobile radio transceiver 11 (See fig. 1) comprising a plurality of antenna 14-17 and a switching circuit S4-S7 wherein the switching circuit being controlled to connect to a particular antenna based on a predetermined signal level (See figs. 2-3 and col. 2 line 36 to col. 3 line 23); therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Chao-Chen to control the switch connecting to directional antenna when the mobile communication device is in talk position and the received signal level higher or equal to a predetermined level or to non-directional antenna when the mobile communication device is in free-standing position and the received signal level lower than a predetermined level for the advantage of minimizing radiation to the user's head as well as radiating power more effectively.

Claims 2-4 are rejected for the same reasons as set forth in claims 1, 5-7 and 9-11.

Regarding claims 8 and 12. Murat & Chao-Chen discloses as cited in claims 6 and 10. However, they do not mention that the mobile communication device comprises a loudspeaker and a touch sensor, wherein the switch connects to directional antenna when the touch sensor is sensing touch and connects to non-directional antenna when the touch sensor is not sensing touch. Since Murat suggests an proximity sensor that is capable of sensing when the headset is placed next to the head to control the switch connecting to directional antenna or when the headset is moved

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away from the head to control the switch connecting to non-directional antenna, and further mobile phone having loudspeaker and touch sensor are well known in the art; therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a loudspeaker in order to allow user to conduct voice communication in even free-standing mode and a touch sensor for the advantage of expanding the capability of the communication device to various types of sensor in order to switch the device to directional or non-directional antenna effectively.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Chiba et al. (US 6,711,382).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

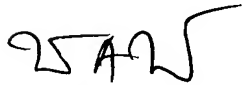
or faxed to:

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(703) 872-9314 (for Technology Center 2600 only)

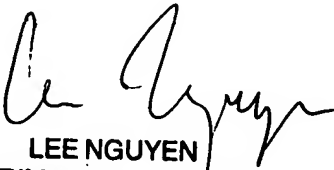
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Tuan Tran

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LEE NGUYEN
PRIMARY EXAMINER